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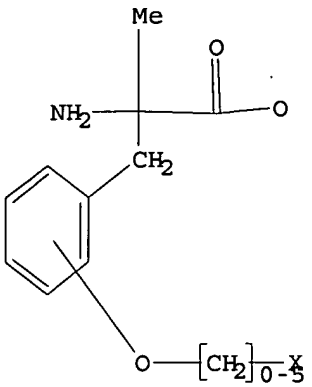
L6 STR



G1 Cb,Cy,Hy,Id,Ak

Structure attributes must be viewed using STN Express query preparation.

=> D HIST

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FILE 'REGISTRY' ENTERED AT 14:09:04 ON 09 JAN 2003
L1 STRUCTURE UPLOADED
L2 0 S L1

FILE 'REGISTRY' ENTERED AT 14:13:40 ON 09 JAN 2003
L3 STRUCTURE UPLOADED
L4 0 S L3
L5 0 S L4 FULL

FILE 'REGISTRY' ENTERED AT 14:19:19 ON 09 JAN 2003
L6 STRUCTURE UPLOADED
L7 0 S L6 FULL

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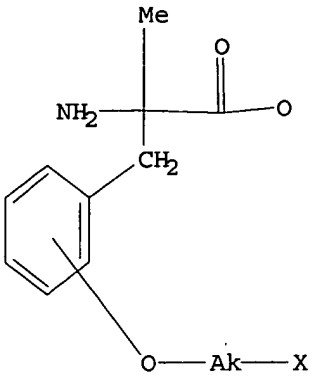
=> D L3
L3 HAS NO ANSWERS
L3 STR



G1 Cb,Cy,Hy,Id,Ak

Structure attributes must be viewed using STN Express query preparation.

=> D HIST

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L1 STRUCTURE UPLOADED
L2 0 S L1

FILE 'REGISTRY' ENTERED AT 14:13:40 ON 09 JAN 2003
L3 STRUCTURE UPLOADED
L4 0 S L3
L5 0 S L4 FULL

=>

> d abs bib

L29 ANSWER 1 OF 1 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 2000:293228 BIOSIS
DN PREV200000293228
TI Rapid synthesis of 18F-**fluoropropyl**-alpha-**methyltyrosine**
.
AU Azhdarinia, A. (1); Yang, D. J.; Wong, F. C.; Tansey, L. W.; Inoue, T.; Kim, E. E.; Podoloff, D. A.
CS (1) M.D. Anderson Cancer Center, Houston, TX USA
SO Journal of Nuclear Medicine, (May, 2000) Vol. 41, No. 5 Suppl., pp. 243P. print.
Meeting Info.: 47th Annual Meeting of the Society of Nuclear Medicine St. Louis, Missouri, USA June 03-07, 2000 Society of Nuclear Medicine
. ISSN: 0161-5505.
DT Conference
LA English
SL English

=>

EAST - [default.wsp:1]

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Drafts

BRS form | IS&R form | Image | Text | HTML

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1	IS&R	L1	239	((424/1.81) or (424/1.85) or (424/1.89)).CCLS.	USPAT	2003/01/09 10:34			0
2	BRS	L2	25211	tyrosin$ or methyltyrosi$ or propyltyrosin$ or	USPAT	2003/01/09 10:36			0
3	BRS	L3	35	1 and 2	USPAT	2003/01/09 10:35			0
4	BRS	L4	3241	(tyrosin$ or methyltyrosi$ or propyltyrosin$ or	USPAT	2003/01/09 10:36			0
5	BRS	L5	6	1 and 4	USPAT	2003/01/09 10:36			0

Hits | Details | HTML

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WEST Search History

DATE: Thursday, January 09, 2003

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L9	l4 and L8	0	L9
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L7	l1 and L6	0	L7
L6	methyltyrosin$	29	L6
L5	l1 and L4	3	L5
L4	tanaka$.in.	16099	L4
L3	inoue$.in	0	L3
L2	inoue$.in.L1	0	L2
L1	tomiyoshi$.in.	68	L1

END OF SEARCH HISTORY

7 ANSWER 1 OF 67 CAPLUS COPYRIGHT 2003 ACS

AB High uptake of [18F]fluoro-2-deoxy-D-glucose (FDG) by inflammatory cells is a frequent cause of false pos. results in lymph node (LN) staging by **positron** emission tomog. Previous studies suggest that **radiolabeled** amino acids may be more specific markers for viable tumor tissue than FDG. The aim of this study was to investigate quant. the uptake of FDG, [3H]methyl-L-methionine (MET) and O-2-([**18F**] **fluoroethyl**)-L-**tyrosine** (FET) in tumor-infiltrated and immunol. stimulated LNs. Popliteal LNs of Balb/c and DBA/2 mice were stimulated by injection into the right posterior foot pad of mice of either streptozotocin (STZ), causing chronic lymphadenitis, or Con A (Con A), resulting in acute lymphadenitis. Tumor-infiltrated popliteal LNs were induced by inoculation of 2.times.105 lacZ-tagged T cell mouse lymphoma cells into the right posterior foot pad of syngeneic mice. Twenty-one days post inoculation of tumor cells or at various time points after STZ or Con A injection, mice were simultaneously injected i.v. with MET and FDG or MET and FET. After 30 min, mice were sacrificed and tracer uptake was detd. in popliteal LNs. Contralateral LNs and LNs of untreated mice served as controls. Histopathol. and immunohistochem. anal. demonstrated typical signs of chronic inflammation (non-specific sinus hyperplasia with macrophages) in STZ-treated animals and acute inflammatory changes (accumulation of neutrophilic granulocytes, vascular dilation, follicular hyperplasia) in Con A-treated animals. X-Gal staining confirmed the presence of tumor cells in the LNs of the injected side of tumor-inoculated mice. In the chronic lymphadenitis model, FDG uptake increased 3.0.+-.0.1 fold [from 2.7.+-.0.2 to 8.2.+-.1.2 percent of injected dose per g tissue (ID/g)] and MET uptake 2.0.+-.0.01 fold (from 4.5.+-.0.6 to 9.2.+-.1.1 ID/g). In the acute lymphadenitis model, FDG uptake increased 3.9.+-.0.3 fold (from 2.7.+-.0.2 to 10.6.+-.2.4 ID/g) and MET uptake 1.9.+-.0.1 fold (from 4.5.+-.0.6 to 8.5.+-.1.4 ID/g). In contrast, FET uptake in both lymphadenitis models (1.0.+-.0.03 and 1.2.+-.0.04 fold) was not significantly different from that in controls (from 4.2.+-.0.3 to 4.7.+-.0.7 and to 5.1.+-.0.4 ID/g, resp.). Uptake of all three tracers in tumor-infiltrated LNs was significantly higher than that in control LNs. FDG uptake increased 2.8.+-.0.15 fold (from 2.7.+-.0.2 to 7.6.+-.1.3ID/g), MET uptake 1.7.+-.0.11 fold (from 4.5.+-.0.6 to 7.5.+-.1.3 ID/g) and FET uptake 2.4.+-.0.15 fold (from 4.2.+-.0.3 to 10.0.+-.1.8 ID/g). MET and FDG uptake was similar or higher in inflammatory than in tumor-infiltrated LNs (P=0.01 and P<0.01, resp.). In contrast, uptake of FET showed no overlap between tumor-infiltrated and inflammatory LNs (P<0.00001). In conclusion, tumor-infiltrated and inflammatory LNs could not be differentiated by means of FDG and MET uptake. FET, in contrast, proved to be a specific tracer for differentiating between tumor-infiltrated and inflammatory LNs in the murine models studied.

AN 2002:569397 CAPLUS

TI O-(2-[**18F**]**Fluoroethyl**)-L-**tyrosine** (FET): a tracer for differentiation of tumour from inflammation in murine lymph nodes

AU Rau, Friederike C.; Weber, Wolfgang A.; Wester, Hans-Juergen; Herz, Michael; Becker, Ingrid; Krueger, Achim; Schwaiger, Markus; Senekowitsch-Schmidtke, Reingard

CS Nuklearmedizinische Klinik der Technischen Universitaet Muenchen, Munich, 81675, Germany

SO European Journal of Nuclear Medicine and Molecular Imaging (2002), 29(8), 1039-1046
CODEN: EJNMA6; ISSN: 1619-7070

PB Springer-Verlag

DT Journal

LA English

RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

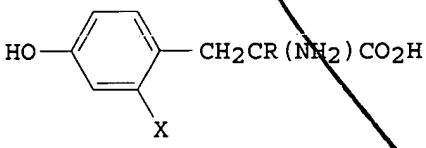
L27 ANSWER 42 OF 67 CAPLUS COPYRIGHT 2003 ACS

AB The direct electrophilic **radiofluorination** of m-**tyrosine** using [**18F**]acetylhypofluorite was investigated. This reaction was both rapid and efficient with recovered decay cor. yield of 71% **radiofluorinted** m-**tyrosines** based on starting AcO18F. Specific activity for the product obtained in this study was 100-200

mCi/mmol although 1-5 Ci/mmol are easily achievable with the improved prodn. of AcO18F. Three positional isomers were found and identified by 19F-NMR to be 2-, 4-, 6-fluoro-m-**tyrosine** with a distribution of 36:11:52, resp. This measured distribution allowed the assignment of the **radio**-HPLC peaks. Biol. studies are currently underway to det. which isomer would be most suited for the evaluation of the dopamine system by **positron** tomog.

AN 1990:478934 CAPLUS
DN 113:78934
TI Synthesis of **radiofluorinated** analogs of m-tyrosine as potential L-dopa tracers via direct reaction with acetylhypofluorite
AU Dejesus, Onofre T.; Sunderland, John J.; Nickles, J. Robert; Mukherjee, Jogeshwar; Appelman, Evan H.
CS Dep. Med. Phys., Univ. Wisconsin, Madison, WI, 53706, USA
SO Applied Radiation and Isotopes (1990), 41(5), 433-7
CODEN: ARISEF; ISSN: 0883-2889
DT Journal
LA English

L27 ANSWER 43 OF 67 CAPLUS COPYRIGHT 2003 ACS
GI



I

AB The title compds. (I; X = 18F, 75Br, 125iodine; R = H, Me), useful as tracers for study of protein synthesis via **positron** emission tomog. or single photon emission tomog., were prepd. Thus, L-O-acetyltyrosine in CF3CO2H at 0.degree. was treated with 18F (0.2% in Ne). The product was deacetylated with NaOH/H2O to give L-2-18F-**tyrosine** (II) with specific activity of .apprx.50 C-B q/mmol in 17% **radiochem**. yield. At 0.75-1.5 MBg i.v. in mice, II was .apprx.84% incorporated in cerebral tissue after 1 h.

AN 1990:56691 CAPLUS
DN 112:56691
TI Preparation of **radiohalotyrosines** for use as tracers in tomography
IN Coenen, Heinz Hubert; Kling, Peer; Stoecklin, Gerhard
PA Kernforschungsanlage Juelich G.m.b.H., Fed. Rep. Ger.
SO Ger. Offen., 4 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3800302	A1	19890727	DE 1988-3800302	19880108
	DE 3800302	C2	19910110		
	US 4925651	A	19900515	US 1988-280804	19881207
PRAI	DE 1988-3800302		19880108		

OS CASREACT 112:56691; MARPAT 112:56691

L27 ANSWER 44 OF 67 CAPLUS COPYRIGHT 2003 ACS
AB 4-[**18F**]**fluoro**-L-m-**tyrosine** (FMT), a biochem. probe of striatal dopaminergic function, has been synthesized (described elsewhere) as a DOPA analog for **positron** emission tomog. Biochem. characterization of this compd. in the rat 30 min after intrajugular administration indicated that in the brain, selective decarboxylation occurred in the striatum, with the formation of 4-fluoro-3-hydroxyphenylethylamine and its metabolites. **Positron** emission tomog. anal. of brain tissue in monkeys (Macaca nemestrina) after i.v. injection of FMT revealed a true time-dependent, specific accumulation of **radioactivity** in striatum, with a

striatum/cerebellum (nonspecific) ratio of 4 at 180 min. Peripheral metab. accounted for <40% of the total **radioactivity** in arterial blood samples after 120 min. The amino acid remained as the major component throughout the period of investigation (5 min, 95%; 10 min, 85%; 30 min, 67%; 60 min, 62%; 120 min, 60%), with a plasma clearance t1/2 of 112 min. 3-O-Methylated metabolites were not obsd. The substrate specificity of FMT, coupled with its limited in vivo peripheral metab., makes it a useful biochem. probe for in vivo, noninvasive evaluation of central dopaminergic mechanisms.

AN 1989:474019 CAPLUS
DN 111:74019
TI 4-[**18F**]**fluoro**-L-m-**tyrosine**: an L-3,4-dihydroxyphenylalanine analog for probing presynaptic dopaminergic function with **positron** emission tomography
AU Melega, William P.; Perlmutter, Milton M.; Luxen, Andre; Nissenson, Charna H. K.; Grafton, Scott T.; Huang, Sung Cheng; Phelps, Michael E.; Barrio, Jorge R.
CS Sch. Med., UCLA, Los Angeles, CA, 90024, USA
SO Journal of Neurochemistry (1989), 53(1), 311-14
CODEN: JONRA9; ISSN: 0022-3042
DT Journal
LA English

L27 ANSWER 51 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AB **Tyrosine** is a precursor of melanin synthesis and might thus present a valuable marker for melanoma. The aim of this study was to evaluate the uptake of alpha-methyl-**tyrosine** (AMT) in melanoma cell cultures and to assess its usefulness as a **radiopharmaceutical** for staging melanoma patients with whole-body scintigraphy. Melanoma (M19-cell lines) and fibroblast (negative control) cell cultures were incubated with 125I-AMT and the **radioactive** uptake in the cell lines was measured in a gamma-counter over 24 h. For in vivo studies, planar whole-body scintigraphy and single photon emission computed tomography (SPECT) of the tumour region was performed following injection of 250-350 MBq 123I-AMT in six patients with known melanoma metastases. Findings were compared with results of whole-body **positron** emission tomography using 18F-fluorodeoxyglucose (FDG-**PET**) as a standard of reference. Fibroblasts showed an unchanged uptake of (mean .+-. SD) 0.cntdot.56 .+-. 0.cntdot.09% 15 min and 0.cntdot.006 .+-. 0.cntdot.09% 24 h, respectively, after incubation of 125I-AMT, whereas there was an increased uptake in melanoma cell cultures over time front 0.cntdot.9 .+-. 0.cntdot.05% to 7.cntdot.5 .+-. 1.cntdot.6%. In staging melanoma patients, the sensitivity of whole-body AMT-scintigraphy compared with FDG- **PET** was 37% (10 of 27 metastases). AMT is transported and metabolized to a high extent in melanoma cells and 123I-AMT is accumulated in melanoma metastases. Owing to its low sensitivity, however, the clinical use of whole- body AMT scintigraphy cannot be recommended.

AN 97218453 EMBASE
DN 1997218453
TI **Radioiodine**-labelled alpha-methyl-**tyrosine** in malignant melanoma: Cell culture studies and results in patients.
AU Boni R.; Steinert H.; Hüch Boni R.; Von Schulthess G.K.; Meyer J.; Dummer R.; Burg G.; Westera G.
CS H. Steinert, Department of Radiology, University Hospital of Zurich, Gloriastrasse 31, CH-8091 Zurich, Switzerland
SO British Journal of Dermatology, (1997) 137/1 (96-100).
Refs: 16
ISSN: 0007-0963 CODEN: BJDEAZ
CY United Kingdom
DT Journal; Article
FS 013 Dermatology and Venereology
014 Radiology
023 Nuclear Medicine
037 Drug Literature Index
LA English
SL English

L27 ANSWER 52 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

AB The tracer 6-[18F]**fluoro**-L-m-**tyrosine** (FMT) was studied with regard to its biochemistry and kinetics, as well as its utility in evaluating brain dopaminergic function in primates before and after 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) treatment using **positron** emission tomography (**PET**). Plasma analysis of FMT and its F18-labeled metabolites 6-fluoro-3-hydroxyphenylacetic acid (FPAC) and 6-fluoro-3-hydroxyphenylethylamine (FMA) during **PET** scanning enabled kinetic analysis of FMT uptake. A separate study examined brain FMT metabolism in MPTP-naive monkeys euthanized 60 or 120 min after FMT injection. Almost 60% of total plasma F-18 activity was associated with FPAC and FMA 120 min after FMT injection. The FMT signal accumulated preferentially in dopaminergic areas such as caudate and putamen. This bilateral FMT signal was disrupted after unilateral intracarotid artery (ICA) MPTP infusion which reduced ipsilateral striatal activity. A three compartment three kinetic rate constant model for FMT uptake revealed reduced FMT decarboxylation (k3) in ipsilateral caudate and putamen after unilateral MPTP although a further decrease was not evident after intravenous MPTP. FPAC was the major F-18 species in all brain regions except in cerebellum where FMT was predominant 60 min post-mortem. FPAC was most concentrated in dopaminergic areas whereas lower levels occurred in areas containing few dopamine terminals. These data demonstrate preferential FMT metabolism and F-18 retention in dopaminergic tissue and support the use of FMT to aluate normal and abnormal dopaminergic function.

AN 97081065 EMBASE
DN 1997081065
TI 6-[18F]**Fluoro**-L-m-**tyrosine**: Metabolism, **positron** emission tomography kinetics, and 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine lesions in primates.
AU Jordan S.; Eberling J.L.; Bankiewicz K.S.; Rosenberg D.; Coxson P.G.; VanBrocklin H.F.; O'Neil J.P.; Emborg M.E.; Jagust W.J.
CS W.J. Jagust, Center for Functional Imaging, Lawrence Berkeley National Lab., University of California, Berkeley, CA 94720, United States. wjjagust@lbl.gov
SO Brain Research, (1997) 750/1-2 (264-276).
Refs: 52
ISSN: 0006-8993 CODEN: BRREAP
PUI S 0006-8993(96)01366-2
CY Netherlands
DT Journal; Article
FS 008 Neurology and Neurosurgery
014 Radiology
LA English
SL English

L27 ANSWER 53 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AB **Radiolabelled** amino acids combined with **Positron** Emission Tomography (**PET**) may be useful for delineation of the extent of viable tumour and may also provide a rapid and sensitive indicator of response to therapy. Promising early clinical reports led us to investigate the potential use of the amino acid analogue L-3-**iodo**-.alpha.-methyl **tyrosine** (IMT), which may be **radioiodinated** with isotopes suitable for **PET** or conventional single photon imaging. We have studied the biodistribution and kinetics of [125I]IMT using two transplantable tumour systems in hooded rats, and have compared the findings with those using the natural amino acid L-**tyrosine** (TYR) **radiolabelled** with tritium. Similar levels of IMT and TYR uptake were found in HSN and OES.HR1 tumours during tumour growth. Following arrest of OES.HR1 tumour growth by oestrogen ablation, reduced IMT and TYR uptake was found to be closely matched by a fall in tumour blood flow. Unlike IMT, a substantial proportion of TYR uptake in tumours was found to be protein incorporated, even following tumour growth arrest. Quantitative autoradiography revealed sharp delineation of tumour boundary using either **radiotracer**. We conclude that IMT and TYR kinetics are strongly influenced by blood flow and diffusion, and that tumour growth status may not be closely associated with amino acid uptake.

AN 95174406 EMBASE
DN 1995174406

TI Uptake of **radiolabelled** tyrosine and iodo-methyl tyrosine in experimental rat tumours: Influence of blood flow and tumour growth rate.
AU Carnochan P.; Deehan B.; Trivedi M.; Tombs A.; Sandle J.; Ott R.
CS Department of Physics, Royal Marsden Hospital, Downs Road,Sutton, Surrey SM2 5PT, United Kingdom
SO Journal of Nuclear Biology and Medicine, (1994) 38/4 SUPPL. 1 (92-95). ISSN: 0392-0208 CODEN: JNBMAT
CY Italy
DT Journal; Conference Article
FS 016 Cancer
023 Nuclear Medicine
030 Pharmacology
037 Drug Literature Index
LA English
SL English

L27 ANSWER 54 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AB **Positron** tomography, using [18F]6-fluoro-L-dopa as a tracer, has been used for the study of Parkinson's disease. Unfortunately, the analysis of data obtained with this agent is bedeviled because it readily forms labeled methylated metabolites that enter the brain. We have evaluated [**18F**]6-**fluoro**-L-m-**tyrosine** (FmT) as an alternative tracer to study intracerebral dopamine metabolism with **positron** tomography. Imaging studies in humans showed specific accumulation of this tracer in the dopamine-rich striatal regions. Reduced striatal uptake of the tracer was demonstrated in a patient suffering from Parkinson's disease. Increased retention of the tracer was demonstrated in a subject pretreated with the peripheral decarboxylase inhibitor carbidopa. Analysis of plasma samples for labeled metabolites of FmT revealed no methylated metabolites. Results of compartmental analysis showed that a two-compartment three rate constant model described adequately the time course of **radioactivity** in the striatum after an injection of FmT. The FmT decarboxylation rate constant (k21) was found to be 0.0108 min-1. Because the peripheral metabolism of FmT is simpler than that of [18F]6-fluoro-L-dopa, we propose FmT as a superior agent with which to study intracerebral dopamine metabolism in health and disease in humans.
AN 95167268 EMBASE
DN 1995167268
TI A probe for intracerebral aromatic amino-acid decarboxylase activity: Distribution and kinetics of [**18F**]6-**fluoro**-L-m-**tyrosine** in the human brain.
AU Nahmias C.; Wahl L.; Chirakal R.; Firnau G.; Garnett E.S.
CS Department of Nuclear Medicine, McMaster University Medical Centre, 1200 Main Street West,Hamilton, Ont. L8N 3Z5, Canada
SO Movement Disorders, (1995) 10/3 (298-304). ISSN: 0885-3185 CODEN: MOVDEA
CY United States
DT Journal; Article
FS 005 General Pathology and Pathological Anatomy
008 Neurology and Neurosurgery
029 Clinical Biochemistry
LA English
SL English

L27 ANSWER 55 OF 67 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AB 4-[**18F**]**Fluoro**-L-m-**tyrosine** (FMT) is an L-Dopa analog that essentially follows the L-Dopa metabolic pathway, but without 3-O-methylation or extensive peripheral metabolism. As such, FMT may serve as a useful probe of striatal dopaminergic function with **positron** emission tomography (**PET**). FMT was synthesized, as previously described by Perlmutter et al. [Appl Radiat Isot 1990; 41: 801-807]. Scanning was undertaken with the SHR2000 **positron** tomograph (image spatial resolution, 3.5 x 4.5 x 6.5 mm). Two Macaca monkeys were anesthetized with ketamine (10 mg/kg) and pentobarbital (20 mg/kg). FMT was administered intravenously (5-6 mCi; specific activity 1-2 Ci/mmol) following carbidopa pretreatment (5 mg/kg i.v., 60 min before FMT administration). Dynamic image acquisition was done for 2 h immediately after tracer injection. This emission acquisition involved twelve 2-min

frames followed by nine 4-min frames, and six 10-min images. Arterial blood samples were collected according to a schedule for assay of plasma [18F] **radioactivity**. Specific uptake of FMT in aromatic L-amino-acid-decarboxylase-rich areas of the monkey striatum was observed with **PET** imaging. The striatum-to-cerebellum ratio of the accumulation increased over time to 3.0 at 2 h. These results show the promise of FMT as a **PET** tracer in evaluating the CNS dopaminergic system.

AN 95117696 EMBASE
DN 1995117696
TI Visualization of dopamine nerve terminals in monkey by **positron** emission tomography using 4-**[18F]fluoro**-L-m-**tyrosine**.
AU Hayase N.; Tomiyoshi K.; Watanabe K.; Horikoshi S.; Hirato M.; Shibasaki T.; Ohye C.
CS Department of Neurosurgery, Gunma University School of Medicine, Showa-machi 3-39-22,Maebashi, Gunma 371, Japan
SO Stereotactic and Functional Neurosurgery, (1994) 62/1-4 (191-196). ISSN: 1011-6125 CODEN: SFUNE4
CY Switzerland
DT Journal; Conference Article
FS 002 Physiology
008 Neurology and Neurosurgery
014 Radiology
037 Drug Literature Index
LA English
SL English

L27 ANSWER 63 OF 67 MEDLINE
AB 3-**[18F]Fluoro**-alpha-**fluoromethyl**-p-**tyrosine** (3-F-FMPT) was evaluated as a tracer for CNS **tyrosine** hydroxylase (TH) activity in rodents and in a rhesus monkey. Results of in vitro experiments using rat striatal homogenates showed that the introduction of fluorine into the 3-phenyl position did not significantly alter the ability of FMPT to act as a TH-activated L-aromatic amino acid decarboxylase (L-AAAD) inhibitor. These studies further showed that 3-F-FMPT-induced L-AAAD inhibition was dose-dependent. Furthermore, striatal homogenates prepared from rats pretreated with the potent TH inhibitor alpha-methyl-p-**tyrosine** was found to have diminished 3-F-FMPT-induced L-AAAD inhibition. However, despite these promising in vitro results, the biodistribution of this compound in mice showed low brain uptake and fast clearance through the kidneys. A **PET** study using a Rhesus monkey injected with 3-[18F]F-FMPT confirmed the results obtained in mice, i.e. negligible brain uptake but high localization in the bladder. We conclude that 3-[18F]F-FMPT would not be useful as a tracer for cerebral TH activity.
AN 97378728 MEDLINE
DN 97378728 PubMed ID: 9234325
TI Evaluation of 3-**[18F]fluoro**-alpha-**fluoromethyl**-p-**tyrosine** as a tracer for striatal tyrosine hydroxylase activity.
AU DeJesus O T; Murali D; Kitchen R; Endres C; Oakes T R; Shelton S E; Freund L; Houser D; Uno H; Holden J E; +
CS Department of Medical Physics, University of Wisconsin, Madison 53719, USA.
NC NS 26621 (NINDS)
SO NUCLEAR MEDICINE AND BIOLOGY, (1994 May) 21 (4) 663-7. Journal code: 9304420. ISSN: 0969-8051.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199709
ED Entered STN: 19970926
Last Updated on STN: 19980206
Entered Medline: 19970915

L27 ANSWER 65 OF 67 MEDLINE
AB The potential of 4-borono-2-**[18F]fluoro**-D,L-

phenylalanine ([**18F**]FBPA), a flurodinated derivative of a target compound for boron neutron capture therapy, for melanoma imaging by **positron** emission tomography (**PET**) was studied using animal models. A high uptake of [18F]FBPA was found in murine B16 melanoma or in Greene's melanoma No. 179, a melanotic cell line in hamsters, for the first 6 h after injection. Whole body autoradiography using [18F]FBPA gave a clear image of the B16 tumor. The acid-insoluble 18F in the B16 increased to 27% by 6 h, and most of the free 18F was detected as [18F]FBPA in both B16 and plasma. In the hamster models, No. 179 showed a 1.7 times higher uptake than amelanotic Greene's melanoma No. 178 at 6 h post-injection, although both melanomas indicated similar metabolic activities when examined by a tracer uptake study using L-[14C]methionine, 2-deoxy-D-[14C]glucose and [3H]thymidine. [18F]FBPA may be a very promising **PET** tracer for melanoma imaging.

AN 92332244 MEDLINE
DN 92332244 PubMed ID: 1629021
TI 4-Borono-2-[**18F**]**fluoro**-D,L-**phenylalanine**: a possible tracer for melanoma diagnosis with **PET**.
AU Ishiwata K; Ido T; Honda C; Kawamura M; Ichihashi M; Mishima Y
CS Division of Radiopharmaceutical Chemistry, Tohoku University, Japan.
SO INTERNATIONAL JOURNAL OF RADIATION APPLICATIONS AND INSTRUMENTATION. PART B, NUCLEAR MEDICINE AND BIOLOGY, (1992 Apr) 19 (3) 311-8.
Journal code: 8611098. ISSN: 0883-2897.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199208
ED Entered STN: 19920904
Last Updated on STN: 20000303
Entered Medline: 19920818

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     FILE 'REGISTRY' ENTERED AT 14:09:04 ON 09 JAN 2003
L1             STRUCTURE UPLOADED
L2           0 S L1

     FILE 'REGISTRY' ENTERED AT 14:13:40 ON 09 JAN 2003
L3             STRUCTURE UPLOADED
L4           0 S L3
L5           0 S L4 FULL

     FILE 'REGISTRY' ENTERED AT 14:19:19 ON 09 JAN 2003
L6             STRUCTURE UPLOADED
L7           0 S L6 FULL

     FILE 'CAPLUS, EMBASE, MEDLINE, BIOSIS' ENTERED AT 14:26:10 ON 09 JAN 2003
L8        508717 S PHENYLALANIN? OR TYROSIN? OR METHYLTYROSIN? OR METHYLPHENYLAL
L9       4973451 S FLUOR? OR RADIOFLUOR? OR RADIOIODIN? OR RADIO? OR IODO?
L10        60282 S L8 AND L9
L11      3005853 S RADIO?
L12        27023 S L10 AND L11
L13        62680 S F-18 OR 18F OR FLUORINE-18 OR RADIOIOD?
L14         1853 S L12 AND L13
L15      3661003 S PHENYLALANIN? OR TYROSIN? OR METHYLTYROSIN? OR METHYLPHENYLAL
L16        14339 S (PHENYLALANIN? OR TYROSIN? OR METHYLTYROSIN? OR METHYLPHENYLA
L17          970 S L16 AND L14
L18          879 S (PHENYLALANIN? OR TYROSIN? OR METHYLTYROSIN? OR METHYLPHENYLA
L19          722 S (PHENYLALANIN? OR TYROSIN? OR METHYLTYROSIN? OR METHYLPHENYLA
L20       182923 S PET OR POSITRON OR RADIOIMAG? OR RADIODIAGNO?
L21          304 S L19 AND L20
L22          208 S L21 AND L11
L23          115 DUP REM L22 (93 DUPLICATES REMOVED)
L24        78239 S PHENYLALANINE/AB
L25       215875 S TYROSINE/AB
L26       271541 S L24 OR L25
L27           67 S L23 AND L26
L28            0 S FLUORO(5A)PROPYLTYROSIN?
L29            1 S FLUOROPROPYL(5A)METHYLTYROSIN?
L30            0 S FLUOROETHYL(5A)METHYLTYROSIN?
L31            0 S FLUOROBUTYL(5A)METHYLTYROSIN?
L32            0 S FLUOROBUTYL(5A)METHYLPHENYLALANIN?
L33            0 S FLUOROALKYL(5A)METHYLTYROSIN?

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